## AMENDMENTS TO THE CLAIMS

- 1. (Canceled).
- 2. (Previously presented) A multi-branched polymer comprising at least one block structure or graft structure represented by the following general formula (II):

$$(P^2)(P^3) - X^1 - - - (II)$$

wherein P<sup>2</sup> is a polar polymer chain having polyolefin side chains (A4) having a number-average molecular weight (Mn) of 500 to 1,000,000, and P<sup>3</sup> is a polymer chain having a number-average molecular weight (Mn) of 500 to 1,000,000, selected from a polyolefin chain having polar polymer side chains (A2), a polar polymer chain (A3) and a polar polymer chain having polyolefin side chains (A4); P<sup>2</sup> and P<sup>3</sup> may be the same or different from each other; X<sup>1</sup> is a linking group containing less than 200 atoms in total and containing a group selected from an ester group, an amide group and an ether group.

3. (Previously presented) A multi-branched polymer comprising a star-shaped structure having three polymer chains bound to a central nucleus represented by the following general formula (III):

$$(\mathbb{P}^4)(\mathbb{P}^5)_2 - \mathbb{X}^2$$
 ----(III)

wherein P<sup>4</sup> is a polyolefin chain (A1) having a number-average molecular weight (Mn) of 500 to 1,000,000; P<sup>5</sup> is a polymer chain having a number-average molecular weight (Mn) of 500 to 1,000,000, selected from a polyolefin chain (A1), a polar polymer chain (A3) and a polar polymer chain having polyolefin side chains (A4); three polymer chains represented by P<sup>4</sup> and two P<sup>5</sup>s may be the same or different from one another; X<sup>2</sup> is a linking group containing less than 200 atoms in total and is selected from the group consisting of i) at least two ether moieties, ii) at least two ester moieties or iii) at least one ether moiety and at least one ester moiety,

Docket No.: 1188-0118PUS1

Docket No.: 1188-0118PUS1

wherein polyolefin chain (A1) is obtained by homopolymerizing or copolymerizing at least one of ethylene, propylene, 1-butene, 1-hexene and 1-octene.

4. (Previously presented) A multi-branched polymer comprising a star-shaped structure having three or more polymer chains bound to a central nucleus represented by the following general formula (IV):

$$(\mathbf{P}^6)_{\mathbf{n}} = \mathbf{X}^3 \qquad ----(\mathbf{I}\mathbf{V})$$

wherein n' is an integer of 3 or more; P<sup>6</sup> is a polymer chain having a number-average molecular weight (Mn) of 500 to 1,000,000, selected from a polyolefin chain (A1) obtained by homopolymerizing or copolymerizing at least one of ethylene, propylene, 1-butene, 1-hexene and 1-octene, a polar polymer chain (A3) and a polar polymer chain having polyolefin side chains (A4); a plurality of P<sup>6</sup>s may be the same or different from one another provided that every P<sup>6</sup> is not the polar polymer chain (A3); and X<sup>3</sup> is a linking group of less than 200 atoms consisting of a multifunctional low-molecular compound residue derived from a multifunctional low-molecular compound selected from halogenated silane, metal halide, alkyl aluminum, glycerin, pentaerythritol, D-glucitol, quercitol, inositol, trihydroxybenzene, hexahydroxybenzene, and carboxylic anhydride.

5. (Previously presented) The multi-branched polymer according to any one of claims 2 to 4, wherein the polar polymer chain having polyolefin side chains (A4) is obtained by homopolymerizing a macromonomer, or copolymerizing two or more macromonomers, selected from a polyolefin macromonomer (M1) represented by the general formula (V), a polyolefin macromonomer (M2) represented by the general formula (VI) and a polyolefin macromonomer (M3) represented by the general formula (VII), or by copolymerizing at least one macromonomer selected from (M1), (M2) and (M3) with at least one monomer (B) selected from organic compounds each having at least one carbon-carbon unsaturated bond:

$$CH_2 = C - P^7$$

$$CH_2 = C - C - O - P^7$$

$$CH_2 = C - VIII$$

wherein  $R^1$  is a hydrogen atom or a methyl group, Y is a heteroatom or a heteroatom-containing group, and  $P^7$  is a polymer chain obtained by homopolymerizing or copolymerizing an olefin represented by  $CH_2$ = $CHR^2$  whereupon  $R^2$  is a group or an atom selected from a  $C_{1-20}$  hydrocarbon group, a hydrogen atom and a halogen atom.

## 6. (Canceled)

Docket No.: 1188-0118PUS1

7. (Previously presented) The multi-branched polymer according to claim 2, wherein the polyolefin chain having polar polymer side chains (A2) comprises a unit (C1) represented by the general formula (VIII) and a unit (C2) represented by the general formula (IX):

wherein  $R^4$  is a group or an atom selected from a  $C_{1-20}$  hydrocarbon group, a hydrogen atom and a halogen atom,  $R^5$  is a  $C_{1-20}$  hydrocarbon group, Z is a heteroatom or a heteroatom-containing group, and W is a polymer chain obtained by (co)polymerizing an addition-polymerizable monomer (D), a ring-opening polymerizable monomer (E) and at least one monomer selected from polyolefin macromonomers (M1) to (M3) represented by the general formulae (V) to (VII).

- 8. (Previously presented) The multi-branched polymer according to any one of claims 2 to 4, wherein the polar polymer chain (A3) is obtained by polymerizing an addition-polymerizable monomer (D) or a ring-opening polymerizable monomer (E).
- 9. (Previously presented) A thermoplastic resin composition comprising the multibranched polymer according to any one of claims 2 to 4.
- 10. (Previously presented) A film, a sheet, an adhesive resin, a compatibilizing agent, a resin modifier, a resin additive, a filler dispersant or a dispersant, which comprises the multi-branched polymer according to any one of claims 2 to 4.

Application No. 10/797,144. Amendment dated May 2, 2007

Docket No.: 1188-0118PUS1

11. (Original) A film, a sheet, an adhesive resin, a compatibilizing agent, a resin modifier, a resin additive, a filler dispersant or a dispersant, which comprises the thermoplastic resin composition according to claim 9.

12-13. (Canceled)